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REMARKS/ARGUMENTS

Original claims 1-26 remain in the application.

Claims 1-3, 14-18 and 21 have been rejected.

Claims 22-26 have been allowed.

Claims 4-13 and 19-20 have been objected to for depending from a rejected claim.

Claims 1-3, 14-18 and 21 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Haun et al. (6,259,996) in view of Sircom (3,879,639). According to M.P.E.P. 706.2(j) three basis criteria must be met for a *prima facie* obviousness rejection of claims under 35 U.S.C. §103(a). First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on the applicant's disclosure. Further, M.P.E.P 2143.03, states "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)."

With respect to claims 1, 3 and 14-17, the Examiner has indicated that "Haun discloses in figure 1, a microcontroller-based (40) system for detecting ground-fault and grounded-neutral conditions". Applicants agree that Haun teaches a microcontroller-based system for detecting

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ground faults and arcing faults in an electrical system; there is no teaching or suggestion of detecting a grounded-neutral condition. The Examiner further suggests that Haun discloses in Column 3, lines 35-46, that the microcontroller 40 is "programmed to use said sensor output signal to detect ground-fault conditions during spaced time intervals". The only thing Haun discloses in column 3, lines 35-46, is that "the arcing fault circuit detector 24, the current fault detector circuit 26 and the ground fault detector circuit 28, as well as some other components" are provided on an application specific integrated circuit (ASIC) 30. Haun further discloses that "outputs from the ASIC 30 are fed to a microcontroller 40 which based on analysis and further processing of the signals provided by the ASIC 30 makes a decision as to whether to send an trip signal to an output 42 for activating a trip circuit 44". From Figure 1, it is clear that Haun provides multiple analog inputs to the microcontroller 40 that are used by the microcontroller to produce a trip signal. Therefore, Haun does not teach or suggest the limitation of using "said sensor output signal to detect ground-fault conditions during spaced time intervals" as required in independent claims 1, 15 and 16. Applicants agree that Sircom teaches a device that detects both ground fault and grounded-neutral conditions in an electrical distribution system. However, there is no teaching or suggestion that the ground fault detection is done "during spaced time intervals" or that grounded-neutral detection is performed "during intervening time intervals between said spaced interval" as required in independent claims 1, 15 and 16. Sircom's Figures 4 and 5, clearly indicate that the ground fault detector 74 and grounded-neutral detector 44c/46c are processing the output signal from sensor 22c simultaneously and continuously to produce a trip signal. The Examiner's suggested combination of Haun and Sircom does not meet the requirements for an obviousness rejection under 35 U.S.C. §103. Therefore, independent claims 1, 15 and 16, define over the Examiner's combined cited art and are deemed to be allowable.

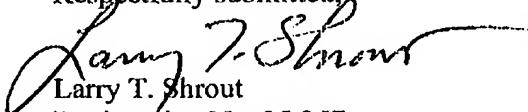
With respect to dependent claims 2, 3, 14, 17, 18 and 21, they are dependent from claims that are deemed to be nonobvious under 35 U.S.C. 103, and are therefore allowable.

Claims 4 and 19 have been rewritten in independent form, as suggested by the Examiner, to place them in condition for allowance.

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In reply to the Office Action dated November 9, 2005, the rejections and objection set forth by the Examiner have been carefully considered, and arguments have been presented herein to overcome the Examiner's §103 rejection of claims 1-3, 14-18 and 21. Claims 4 and 19 have been amended to independent form as suggested by the Examiner. Please charge our Deposit Account No. 19-3875 for additional independent claim fees and/or other required fees. Applicants believe all pending claims are in condition for allowance and respectfully request a favorable reconsideration and allowance of this Application.

Respectfully submitted,



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